

**STANDARDIZED METHOD AND APPARATUS FOR GATHERING DEVICE
IDENTIFICATION AND CONFIGURATION INFORMATION
VIA A PHYSICAL INTERFACE**

ABSTRACT

Described is a standard physical interface with a standardized response protocol would enable a craft or technician employee accurately and quickly to verify network devices' various identities and configurations, including relatively fixed hardware configurations and relatively rapidly changing software configurations. The apparatus for gathering network device data includes a first non-volatile memory on the network device storing defined device-specific data and being writable via the network and also readable. The apparatus further includes a physical read port on the network device including a set of one or more signals defining a physical interface and a protocol for reading the data from the first memory. Finally, the apparatus includes data-gathering means physically separate from but compatible with the read port and programmed to read the data from the first memory in accordance with the protocol, the data-gathering means including a second non-volatile memory for recording the data read from the first memory. The first memory may be partitioned to include plural storage locations for data of various types including network device identification data regarding hostname, IP address, MAC address, CLI codes and physical device location, as well as configuration data regarding at least hardware and software revisions. The method includes providing a network device with a non-volatile memory and with an externally accessible physical data read port; programming one or more memory locations therein with data regarding the identification and configuration thereof, the one or more memory locations being readable by an external reader mechanism over the port; and providing a portable reader mechanism external to the network device but physically and logically compatible therewith for reading and recording the data from the network device.